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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,674	05/23/2001	C. Frederick Battrell	5SMV41.1	1283

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EXAMINER

SIEFKE, SAMUEL P

ART UNIT

PAPER NUMBER

1743

DATE MAILED: 06/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

09/863,674

Applicant(s)

BATTRELL ET AL

Examiner

Samuel P Siefke

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Weigl et al. (USPN 6,171,865 B1).

Weigl discloses a simultaneous analyte determination apparatus that comprises: a first inlet (fig. 3, ref. 30), second inlet (fig. 3, ref. 20A) and third inlet (fig. 3, ref. 25A; downstream of 1st and 2nd inlet); and a first outlet (fig. 3, ref. 60); a first fluid comprising a diffusible constituent (fig. 3, ref. 80; col. 24, line 64-col. 25, line 46) flowing through first inlet into a channel (fig. 3, ref. 100, flow is parallel); a second fluid flowing through a second inlet (fig. 3, ref. 20A, 70A) into the channel (100), providing a diffusion interface (fig. 3, ref. 140A) between first and second fluid wherein a diffusible constituent diffuse from the first fluid into the second fluid (col. 25, lines 24-28) such that the concentration (col. 3, lines 55-66) of diffusible species varies along the longitudinal axis of the diffusion interface (col. 25, lines 24-28); a third fluid inlet (fig. 3, ref. 25A), third fluid (75A) and the first fluid (80) surround the second fluid (70A) in the channel, wherein the diffusible constituents diffuse into the second fluid (fig. 3, ref. 140A and 145A; col. 25,

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lines 24-28); thus diluting the second fluid such that the concentration of the second fluid is gradually decreased with the distance from a section of the channel where first and second fluids contact each other (fig. 3, noting all references of the 1st, 2nd, and 3rd inlets moving toward the exit port; col. 24, line 64-col. 25, line 46). The first and third fluids are introduced through a first and third inlet from a common inlet (this common inlet will be described as the channel in which all the inlets come together in Fig. 3, ref. 100). The microfluidic device is located on a chip (col. 9, lines 62-67). Measurements can be taken on any part of the microfluidic device (col. 9, lines 1-22). The rate of flow of the first fluid and the second fluid remain content (col. 11, lines 32-51) or where the rate of flow is different (col. 16, lines 24-50). The diffusible constituent consists of a soluble compound, biological material (cells, proteins); (col. 10, line 48-col. 11, line 11). The fluid from the second inlet comprises undissolved particles (microbeads) (col. 14, lines 58-col. 15, line 12). Other important parts of the specification of the reference that describe the prior art or further the invention (col. 3, lines 1-16 and 55-67; col. 5; col. 6, lines 4-14; fig. 1-7; col. 7-18; col. 22, line 13-col. 26, line 39; claims 1-22).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel P Siefke whose telephone number is 703-306-0093. The examiner can normally be reached on M-F 7:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 703-308-4037. The fax phone numbers


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for the organization where this application or proceeding is assigned are 703-872-9311 for regular communications and 703-872-9310 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

SPS
June 25, 2003




Jill Warden
Supervisory Patent Examiner
Technology Center 1700